



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY, FLORIDA
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

Marvin Windows and Doors

Highway 11 West

P. O. Box 100

Warroad, MN 56763-0100

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER-Product Control Section to be used in Miami-Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION:

Series "French Stormplus IZ4" 8 ft. Aluminum Clad Wood Outswing Glazed Door - L.M.I.

APPROVAL DOCUMENT: Drawing No. 1487, "8 Ft. Aluminum Clad Out-Swing Wood Impact Doors", sheets 1 through 11 of 11, prepared by W. W. Schaefer Engineering & Consulting, P. A., dated 08/17/06 and latest revision "B1", dated 09/11/12, signed and sealed by Warren W. Schaefer, P. E., bearing the Miami-Dade County Product Control Section Revision stamp with the Notice of Acceptance number and Expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises** NOA No. 11-1026.03 and consists of this page 1 and evidence pages E-1, E-2 and E-3, as well as approval document mentioned above.

The submitted documentation was reviewed by **Jaime D. Gascon, P. E.**



J Gascon
12/11/12

NOA No. 12-0913.06

Expiration Date: May 03, 2017

Approval Date: December 20, 2012

Page 1

Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under previous NOA No. 06-1228.02)
2. Drawing No. **1487**, "8 Ft. Aluminum Clad Out-Swing Wood Impact Doors", sheets 1 through 11 of 11, prepared by W. W. Schaefer Engineering & Consulting, P. A., dated 08/17/06 and latest revision "**B1**", dated 09/11/12, signed and sealed by Warren W. Schaefer, P. E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of outswing wood door, prepared by Architectural Testing, Inc., Test Report No. **ATI-67287.01-201-18**, dated 12/01/2006, signed and sealed by Joseph A. Reed, P.E.
(Submitted under previous NOA No. 06-1228.02)

C. CALCULATIONS

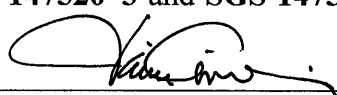
1. Anchor verification calculations and structural analysis, complying with FBC-2007, **FBC-2010** and ANSI/ AAMA/ NWWDA 1001/ I.S.2-97, prepared by W. W. Schaefer Engineering & Consulting, P.A., dated 10/17/11, signed and sealed by Warren W. Schaefer, P. E.
(Submitted under previous NOA No. 11-1026.03)
2. **Glazing complies with ASTM E1300-04**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **11-0624.02** issued to **E.I. DuPont DeNemours & Co., Inc.** for their "**DuPont SentryGlas® Interlayer**" dated 08/25/11, expiring on 01/14/17.
2. Test reports on: 1) Determining Ignition Temperature of Plastic, per ASTM D-1929;
2) Density of Smoke Testing of Fiberglass Reinforced Plastic, per ASTM D-2843;
along with installation diagram, prepared by SGS U. S. Testing Company, Inc., Test Reports No.'s **SGS 147520-1**, **SGS 147520-2**, **SGS 147520-3** and **SGS 147520-4**, dated 10/27/00, signed by Michael S. Elliott.
(Submitted under previous NOA No. 06-1228.02)


Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 12-0913.06
Expiration Date: May 03, 2017
Approval Date: December 20, 2012

Marvin Windows and Doors


NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS (CONTINUED)

3. Test reports on: 1) Tensile Properties and Xenon-Arc Weathering Tests of Fiberglass Reinforced Plastic;
2) Flammability Testing of Fiberglass Reinforced Plastic, per ASTM D-635;
3) Flammability Testing of Geon 06935-3490, per ASTM D-635;
4) Ignition Temperature Testing of Geon 06935-3490, per ASTM D-2843 and Density of Smoke Testing of Fiberglass Reinforced Plastic.
along with marked-up drawings and installation diagram, prepared by Stork/ Twin City Testing Corporation, Inc., Test Reports No.'s **TCT 18 0-0758, TCT 18 0-0758.1, TCT 18 0-0758.2, TCT 18 0-0758.3** and **TCT 18 0-0796**, dated 10/12, 11/08, 11/09, 11/16, 11/29/2000 and 04/19/2001, signed and sealed by Derrick J. Swanson, P. E.
(Submitted under previous NOA No. 06-1228.02)
4. Test reports on: 1) Determining Ignition Temperature of Plastic, per ASTM D-1929; along with installation diagram prepared by Intertek Testing Services NA, Inc., Test Report No. **ITS-3119811SAT-001**, dated 03/28/2007, signed by Servando Romo.
(Submitted under previous NOA No. 06-1228.02)
5. Test reports on: 1) Determining Ignition Temperature of Plastic, per UL 723 substitute to ASTM E-84;
along with installation diagram prepared by Underwriters Laboratories, Inc., Test Report No. **UL-R11183**, dated 01/09/2006, signed by Janet L. Burton.
(Submitted under previous NOA No. 06-1228.02)

F. STATEMENTS

1. Statement letter of conformance and compliance with the FBC-2007 including supplements, **FBC-2010** and ANSI/ AAMA/ NWWDA 1001/ I.S.2-97, prepared by W. W. Schafer Engineering & Consulting, P.A., dated 10/17/11, signed and sealed by Warren W. Schafer, P. E.
(Submitted under previous NOA No. 11-1026.03)
2. Statement letter of no financial interest and independence, dated 10/17/11, signed and sealed by Warren W. Schafer, P. E.
(Submitted under previous NOA No. 11-1026.03)
3. Laboratory compliance letter for Test Report No. **ATI-67287.01-201-18**, issued by Stork/ Twin City Testing Corporation, Inc., dated 12/01/06, signed and sealed by Joseph A. Reed, P. E.
(Submitted under previous NOA No. 06-1228.02)
4. Laboratory compliance letter for Test Reports No.'s **TCT 18 0-0758, TCT 18 0-0758.1, TCT 18 0-0758.2, TCT 18 0-0758.3** and **TCT 18 0-0796**, issued by Architectural Testing, Inc., dated 10/12, 11/08, 11/09, 11/16, 11/29/00 and 04/19/01, signed and sealed by Derrick J. Swanson, P. E.
(Submitted under previous NOA No. 06-1228.02)


Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 12-0913.06
Expiration Date: May 03, 2017
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Marvin Windows and Doors

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. STATEMENTS (CONTINUED)

5. Laboratory compliance letter for Test Reports No.'s **SGS 147520-1, SGS 147520-2, SGS 147520-3** and **SGS 147520-4**, issued by SGS U. S. Testing Company, Inc., dated 10/27/00, signed by Michael S. Elliott.
(Submitted under previous NOA No. 06-1228.02)
6. Laboratory compliance letter for Test Report No. **UL-R11183**, issued by Underwriters Laboratories, Inc., dated 01/09/06, signed by Janet L. Burton, P. E.
(Submitted under previous NOA No. 06-1228.02)
7. Laboratory compliance letter for Test Report No. **ITS-3119811SAT-001**, issued by Intertek Testing Services NA, Inc., dated 03/28/07, signed by Servando Romo.
(Submitted under previous NOA No. 06-1228.02)

G. OTHERS

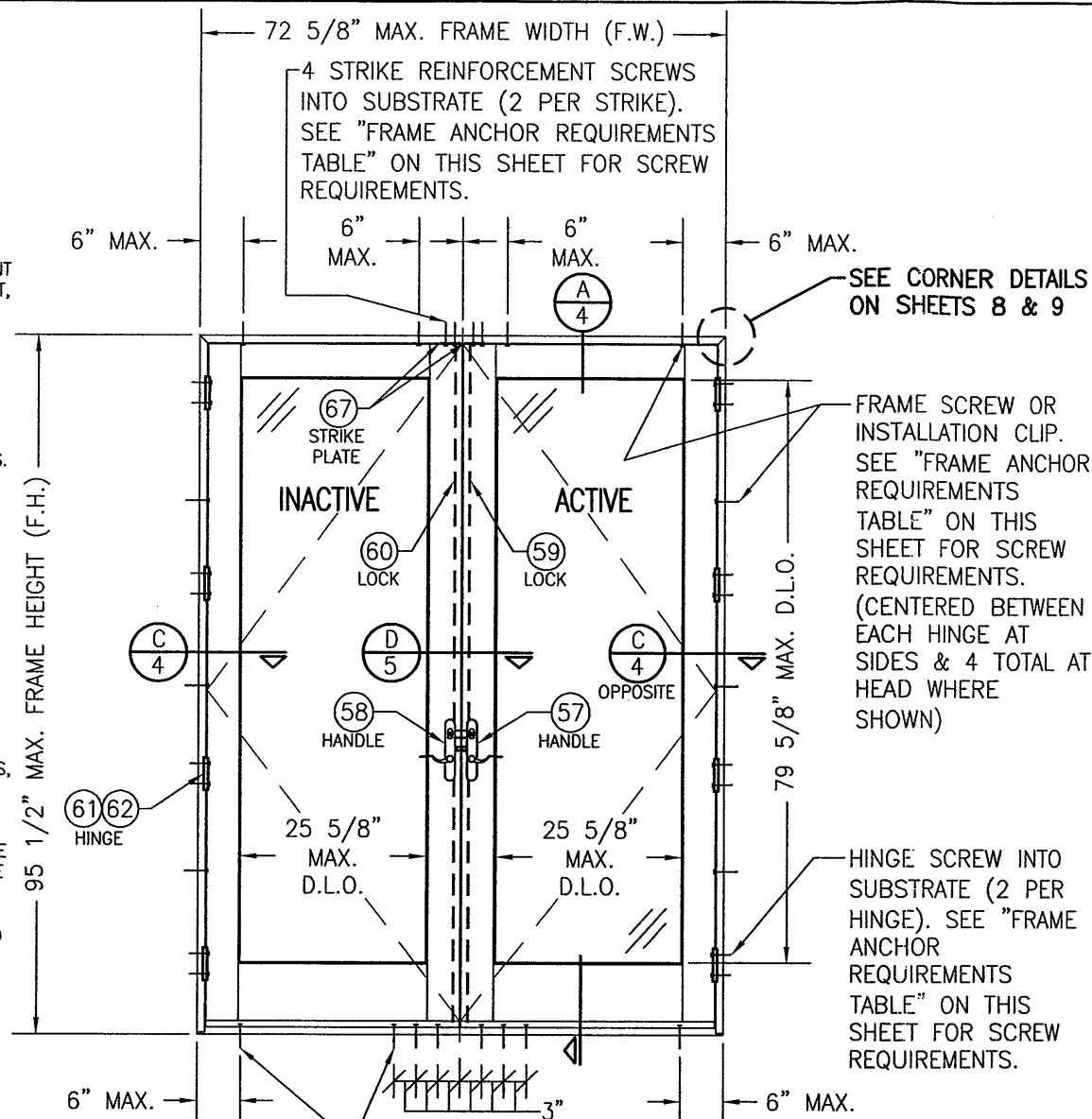
1. Notice of Acceptance No. **11-1026.03**, issued to Marvin Windows and Doors for their Series "**French Storm Plus I-Z4 8'-0" Aluminum Clad Wood Outswing Glazed Doors - L.M.I.**", approved on 12/22/11 and expiring on 05/03/17.



Jaime D. Gascon, P. E.
Product Control Section Supervisor
NOA No. 12-0913.06
Expiration Date: May 03, 2017
Approval Date: December 20, 2012

GENERAL NOTES:

1. THESE DOOR SYSTEMS HAVE BEEN TESTED, ANALYZED & APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN PRESSURE TABLE(S)".
2. OPENINGS, BUCKING & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & SHALL NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS. SPECIFIED ANCHOR EMBED TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH THE FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT DOORS.
5. THESE DOOR SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE DOORS.
7. ALL ANCHORS SECURING DOOR FRAME TO PRESSURE TREATED BUCKS OR WOOD FRAMING SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE PRESSURE TREATING CHEMICALS IN THE WOOD.
8. DETERMINE THE POSITIVE & NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ MAY BE APPLIED PER THE ASCE-7 STANDARD.
9. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE CERTIFICATION OF THIS PRODUCT. WIND LOAD DURATION FACTOR $C_d = 1.6$ WAS USED FOR WOOD SCREW ANALYSIS ONLY.
10. MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF FLORIDA BUILDING CODE CHAPTER 20.
11. ALL WOOD MEMBERS OF DOORS THAT MAY POSSIBLY COME INTO CONTACT WITH MASONRY OR CONCRETE SUBSTRATES, ARE SUBJECT TO MOISTURE &/OR ARE SUBJECT TO THE OUTSIDE ENVIRONMENT SHALL BE OF AN APPROVED DURABLE SPECIES OR BE TREATED IN AN APPROVED METHOD WITH AN APPROVED PRESERVATIVE PER FBC SECTION 2326.



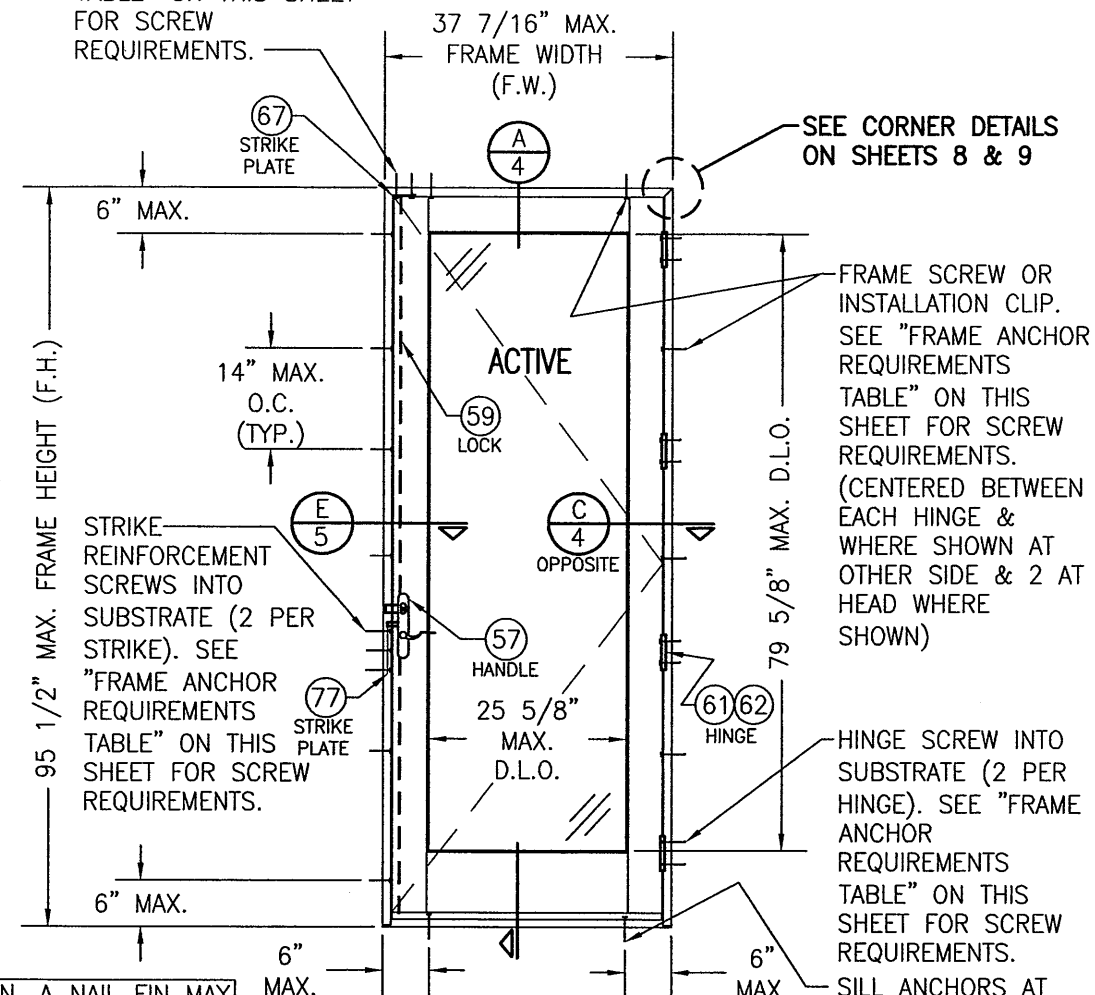
SILL ANCHORS WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS (1 AT EACH CORNER & 6 AT SILL MID-SPAN AS SHOWN).

EXTERIOR ELEVATION DOUBLE OUTSWING DOOR

SCALE: 1/2" = 1'-0"

NOTE: ALTHOUGH NOT SHOWN, A NAIL FIN MAY BE APPLIED AROUND THE DOOR FRAMES IN ADDITION TO ANCHOR CONDITIONS SHOWN TO ACT AS A PERIMETER SEAL (NAIL FIN SHALL NOT BE A SUBSTITUTE FOR ANCHOR CONDITIONS SHOWN).

STRIKE REINFORCEMENT SCREWS INTO SUBSTRATE (2 PER STRIKE). SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.



EXTERIOR ELEVATION SINGLE OUTSWING DOOR

SCALE: 1/2" = 1'-0"

SILL ANCHORS AT EACH CORNER WHERE SHOWN. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.

THESE DRAWINGS ARE APPLICABLE ONLY TO THE PRODUCT SPECIFIED. THEY MAY NOT BE USED FOR THE ASSEMBLY AND/OR INSTALLATION OF ANY OTHER PRODUCT NOR MAY THEY BE USED FOR RATIONAL AND/OR LOCAL APPROVAL OF ANY PRODUCT NOT PRODUCED BY THE MANUFACTURER STATED ON THESE DRAWINGS.

DRAWN BY:	W.R.M.	CHECKED BY:	W.W.S.
PLOT:	1=24	DATE:	8/17/06
DATE:	10/17/11		
BY:	W.R.M.		
REVISION DESCRIPTION	STANDARDS	CLADDING	
NO.	A1	B1	
	UPDATE TO CURRENT	ADDED NEW DOOR PANEL	

DRAWING TITLE
8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS

MANUFACTURER
MARVIN WINDOWS & DOORS
HIGHWAY 11; P.O. BOX 100
WARROAD, MN 56763
800-346-5044

CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

FRAME ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
FRAME SHEAR SCREWS			
2X_ WOOD FRAME OR BUCK	NO. 10 SMS SCREW	1 1/4"	3/4"
(2) MIN. C90 CMU	(1) 1/4" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/2"	2"
MIN. 18 GAGE 33 KSI METAL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK. 6063-T5 ALUMINUM OR A36 STEEL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"

HINGE & STRIKE SHEAR SCREWS

2X_ WOOD FRAME OR BUCK	NO. 10 SMS SCREW	1 1/4"	3/4"
(2) MIN. C90 CMU	(1) 3/16" CONCRETE SCREW	1 1/4"	2"
MIN. 2500 PSI CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/2"	2"
MIN. 18 GAGE 33 KSI METAL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK. 6063-T5 ALUMINUM OR A36 STEEL	NO. 10 SELF TAP/DRILLING SCREW	FULL	1/2"

HINGE REQUIREMENTS

MAX. FRAME HEIGHT	MIN. # OF HINGES
95 1/2"	4
82"	3

NOTE: DOORS MAY BE FULLY GLAZED AS SHOWN OR PARTIALLY PANELED. SEE SHEET 3 ELEVATION FOR PARTIAL PANELED DOORS.

ALLOWABLE DESIGN PRESSURE

SEE LOAD TABLES ON SHEET 2

FRAME ANCHOR REQUIREMENTS TABLE (CONT'D)

INSTALLATION CLIP SCREWS			
2X_ WOOD FRAME OR BUCK	NO. 8 SMS SCREW	1 3/8"	3/4"
MIN. 18 GAGE 33 KSI METAL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"
MIN. 1/8" THK. 6063-T5 ALUMINUM OR A36 STEEL	NO. 8 SELF TAP/DRILLING SCREW	FULL	1/2"

- (1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS (C.S.), ELCO CRETE-FLEX (S.S.), ITW RAMSET/RED HEAD TAPCONS (C.S. OR S.S.) OR HILTI KWIK-CON II (C.S. OR S.S.).
(2) CMU IS APPLICABLE AT SIDES ONLY.

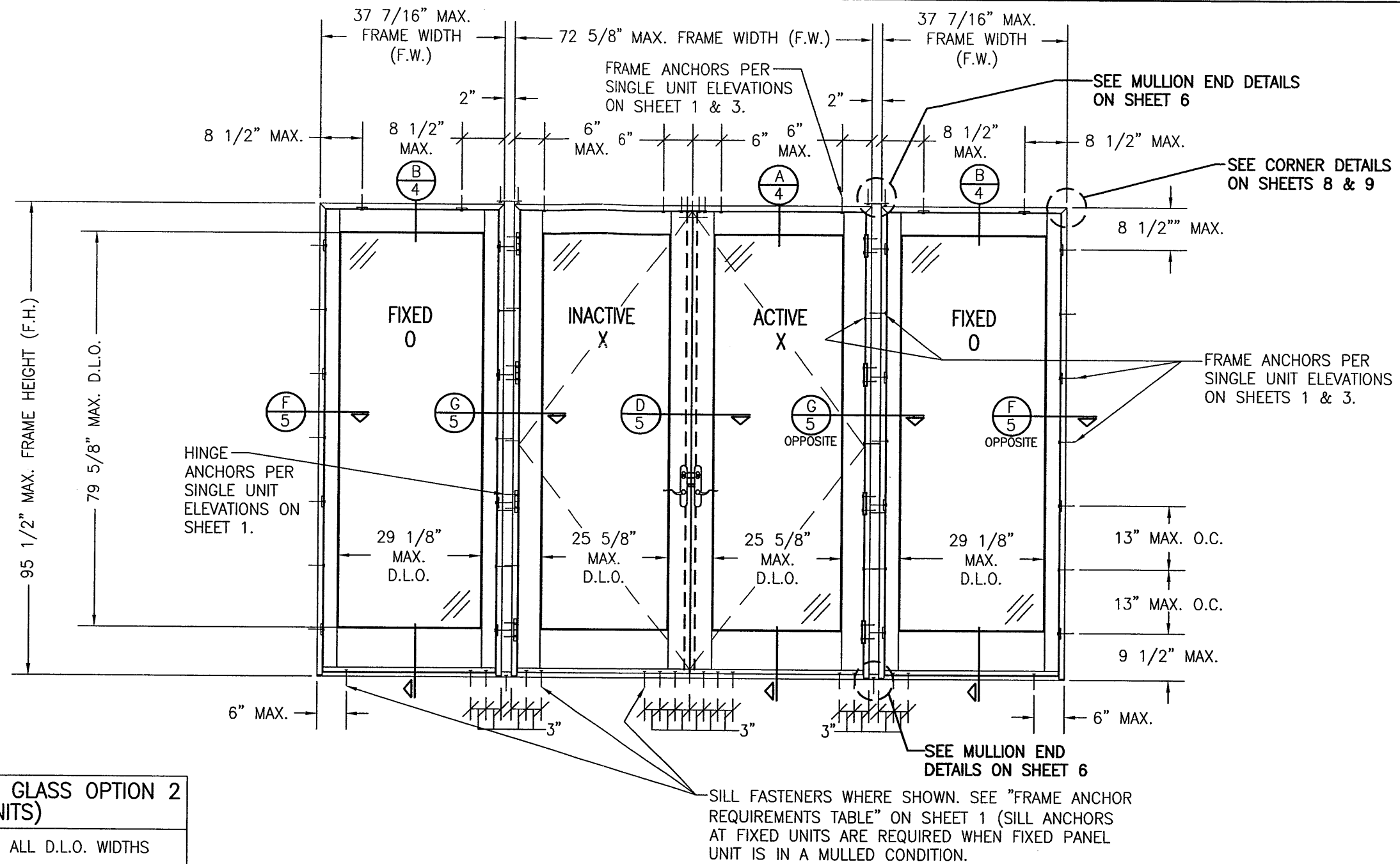
PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 12-09/13-06 Expiration Date 05/03/2017
By: [Signature]
Miami Dade Product Control



CERTIFICATION

SEP 11 2012

DRAWING NO.	REV.
1487	B
SHEET NO.	
1 OF 11	



ALLOWABLE DESIGN PRESSURE WITH GLASS OPTION 2 (SINGLE & MULLED UNITS)

DOOR TYPE	MAX. FRAME HEIGHT	MAX. D.L.O. HEIGHT	ALL D.L.O. WIDTHS
SINGLE & DOUBLE OPERABLE	95 1/2"	79 5/8"	+65/-80 PSF
SINGLE & DOUBLE OPERABLE	82"	66 1/8"	+65/-85 PSF
FIXED PANEL	95 1/2"	79 5/8"	+65/-85 PSF

NOTE: SEE GLAZING DETAIL ON SHEET 6 FOR GLASS OPTIONS.

ALLOWABLE DESIGN PRESSURE WITH GLASS OPTION 1 (SINGLE & MULLED UNITS)

DOOR TYPE	MAX. FRAME HEIGHT	MAX. D.L.O. HEIGHT	D.L.O. WIDTH LESS THAN OR EQUAL TO 23 5/8"	D.L.O. WIDTH BETWEEN 23 5/8" & 25 5/8"	D.L.O. WIDTH = 25 5/8" TO 29 1/8"
SINGLE & DOUBLE OPERABLE	95 1/2"	79 5/8"	+65/-80 PSF	+65/-72 PSF	N/A
SINGLE & DOUBLE OPERABLE	82"	66 1/8"	+65/-85 PSF	+65/-78 PSF	N/A
FIXED PANEL	95 1/2"	79 5/8"	+65/-85 PSF	+65/-72 PSF	+57/-57 PSF

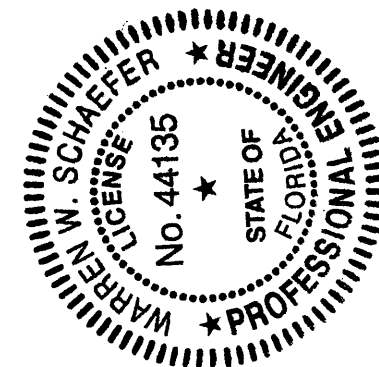
NOTE: SEE GLAZING DETAIL ON SHEET 6 FOR GLASS OPTIONS.

EXTERIOR ELEVATION DOUBLE OUTSWING DOOR WITH SIDELIGHTS

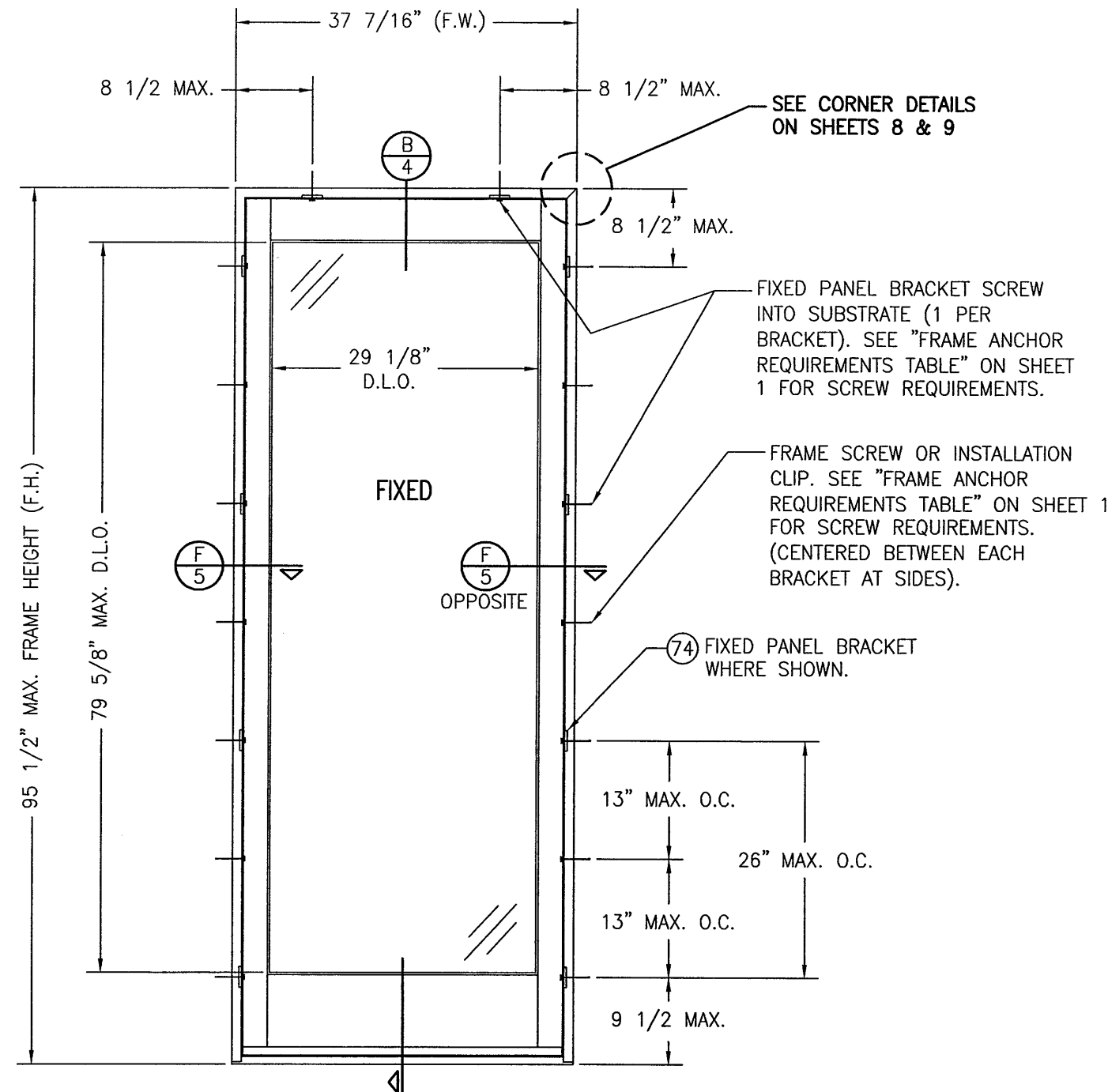
SCALE: 1/2" = 1'-0"

OXXO DOOR SHOWN. ALL OTHER 4-PANEL CONFIGURATIONS
NOTE: OF SINGLE/DOUBLE DOORS & SIDELIGHTS ALSO APPLY.
(FOR ALL DETAIL NOT SHOWN, SEE SINGLE UNIT ELEVATIONS.)

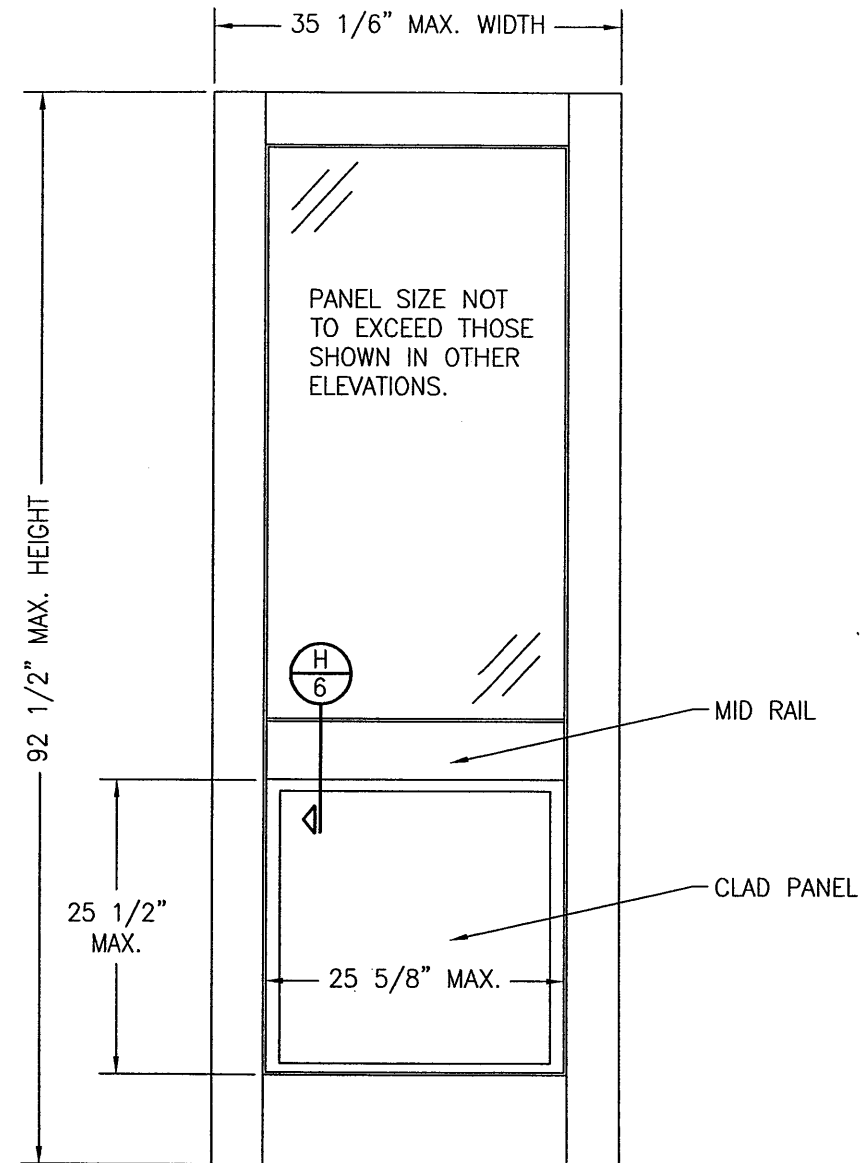
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0913.06
Expiration Date 05/03/2017
By [Signature]
Miami Dade Product Control



DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=24		DATE: 8/17/06	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE 8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION	SEP 11 2012	WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1487	REV. B	SHEET NO. 2 OF 11	



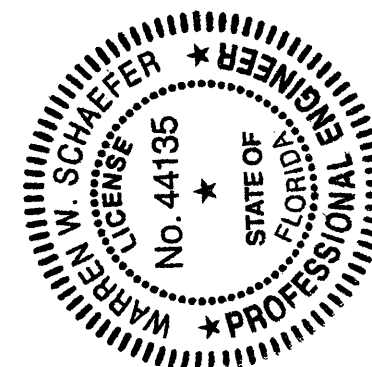
**EXTERIOR ELEVATION
SINGLE FIXED PANEL**
SCALE: 3/4"=1'-0"



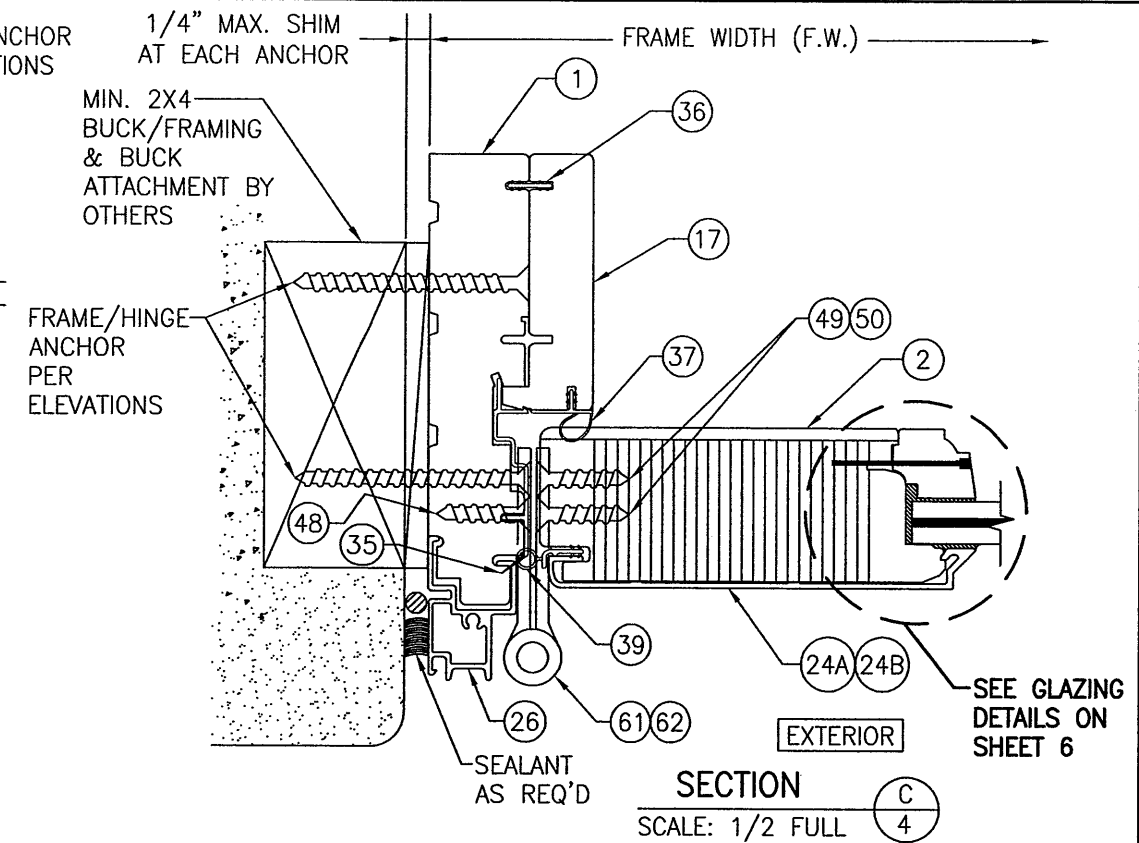
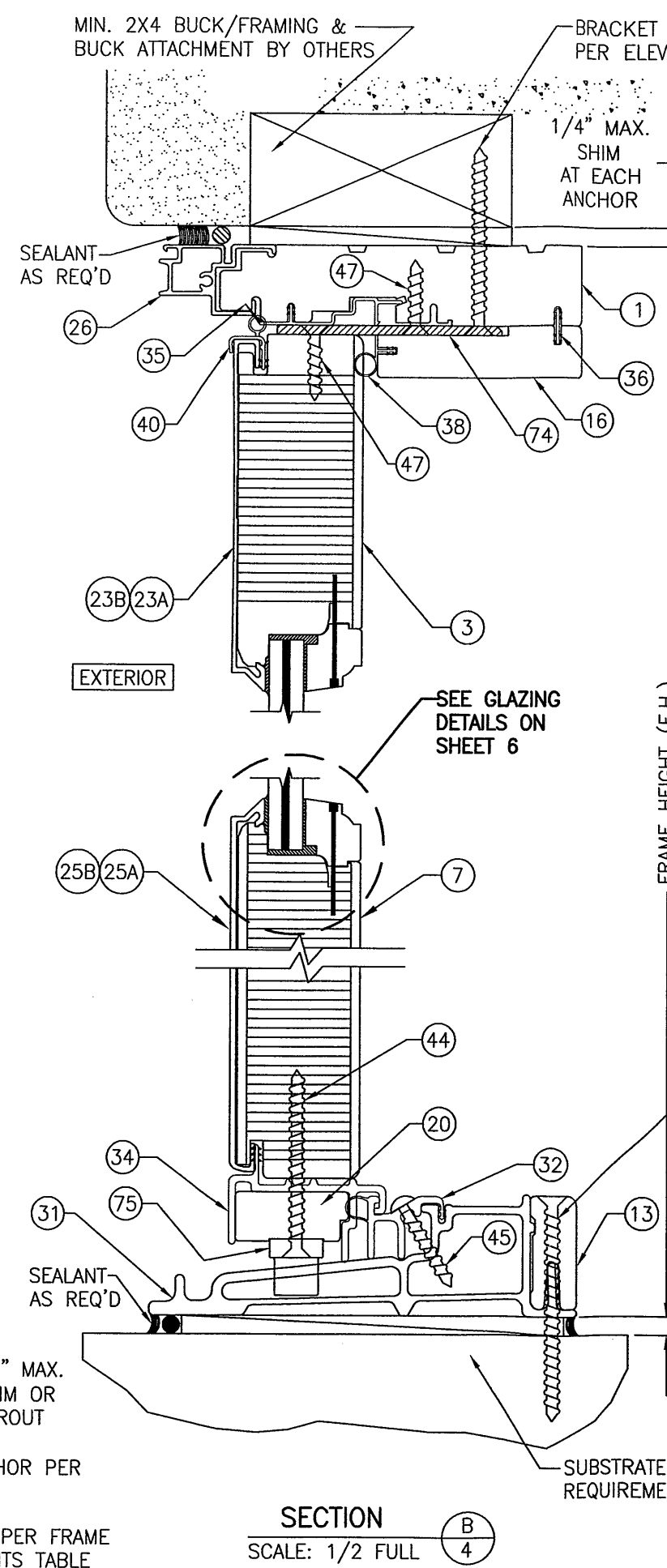
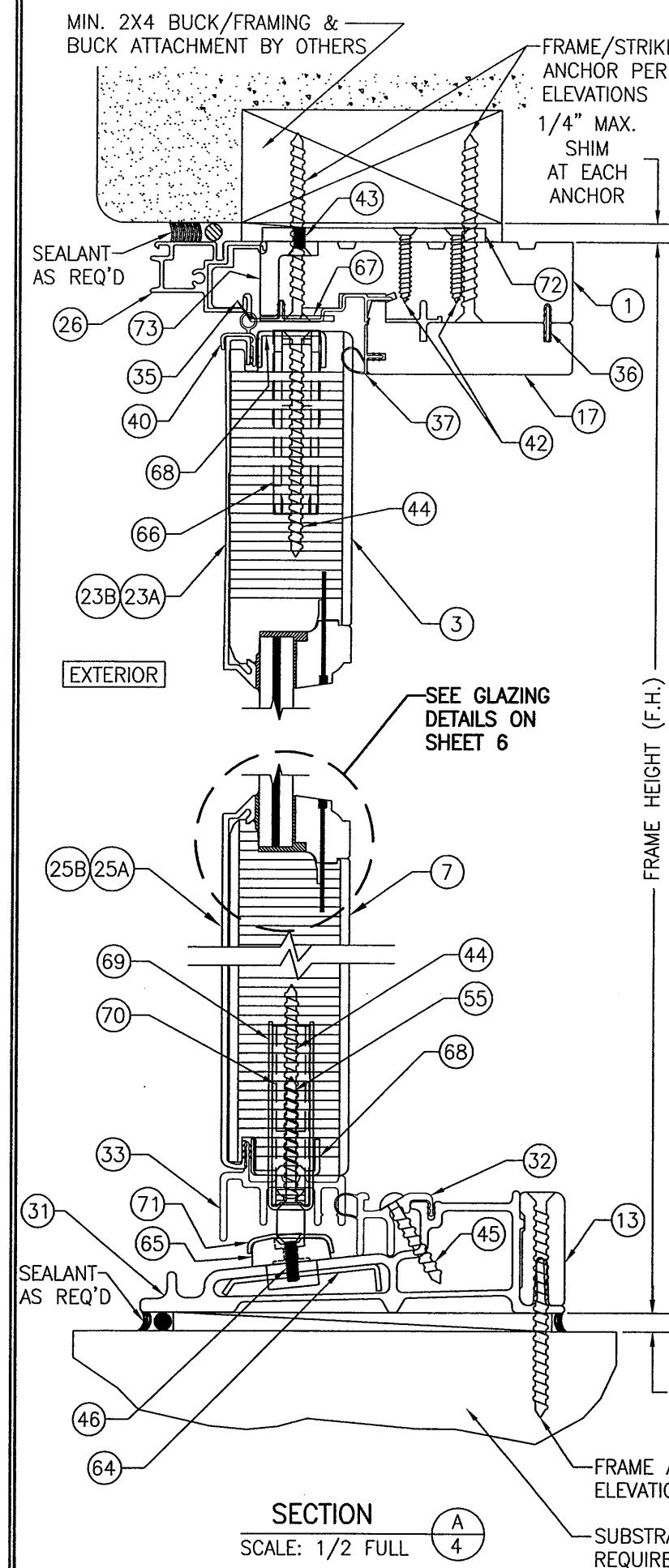
**EXTERIOR ELEVATION
RAISED PANEL**
SCALE: 3/4"=1'-0"

NOTE: PANEL ONLY IS SHOWN.
FOR INSTALLATION INTO FRAME,
SEE OTHER ELEVATIONS.

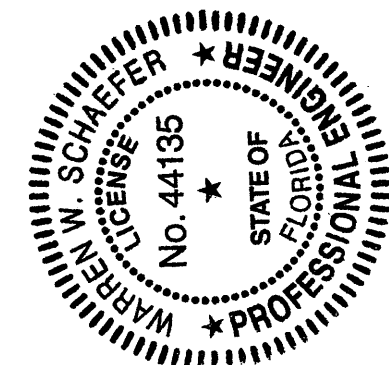
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0913.06
Expiration Date 05/03/2017
By *[Signature]*
Miami Dade Product Control

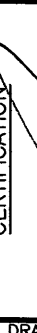


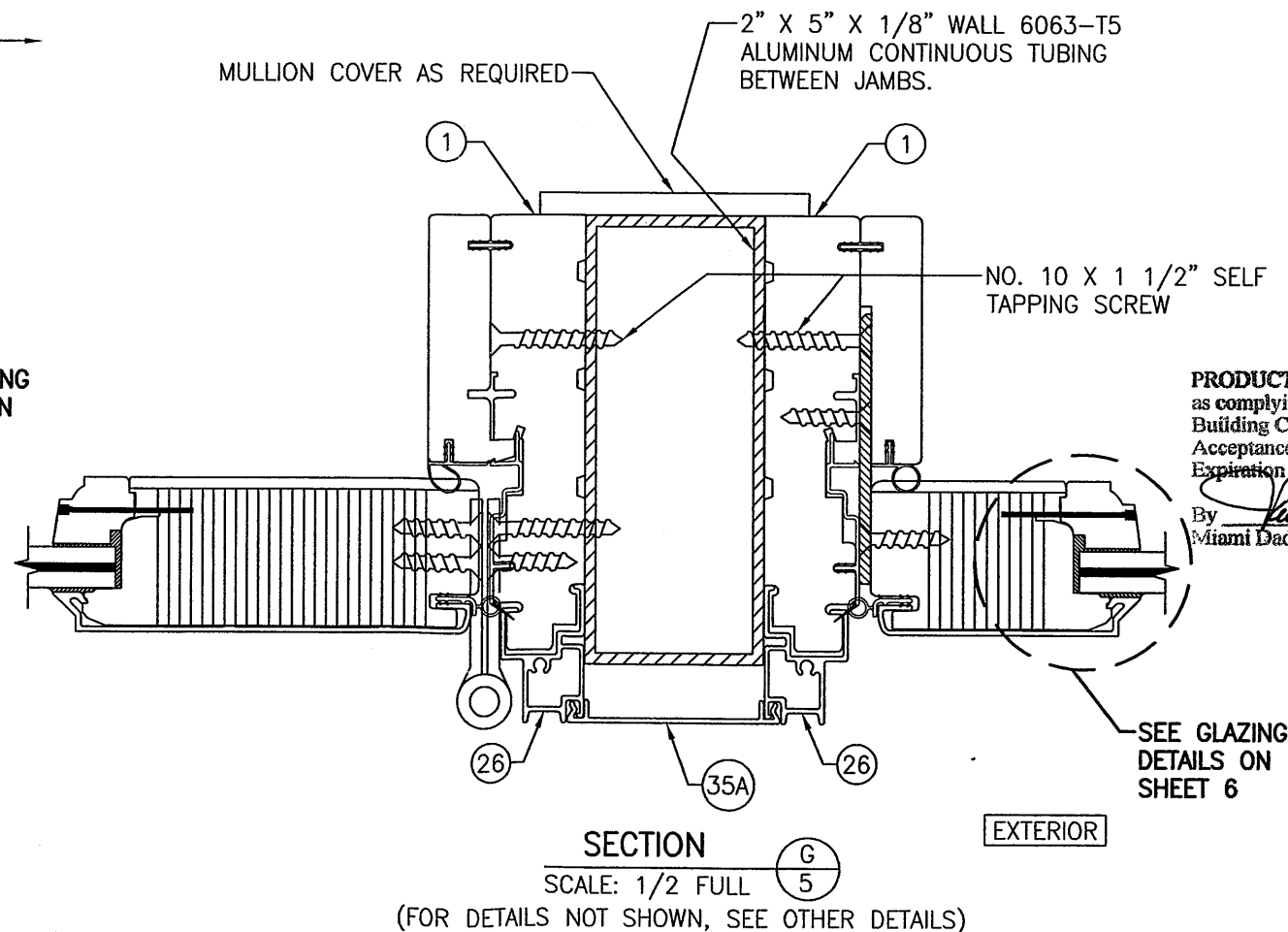
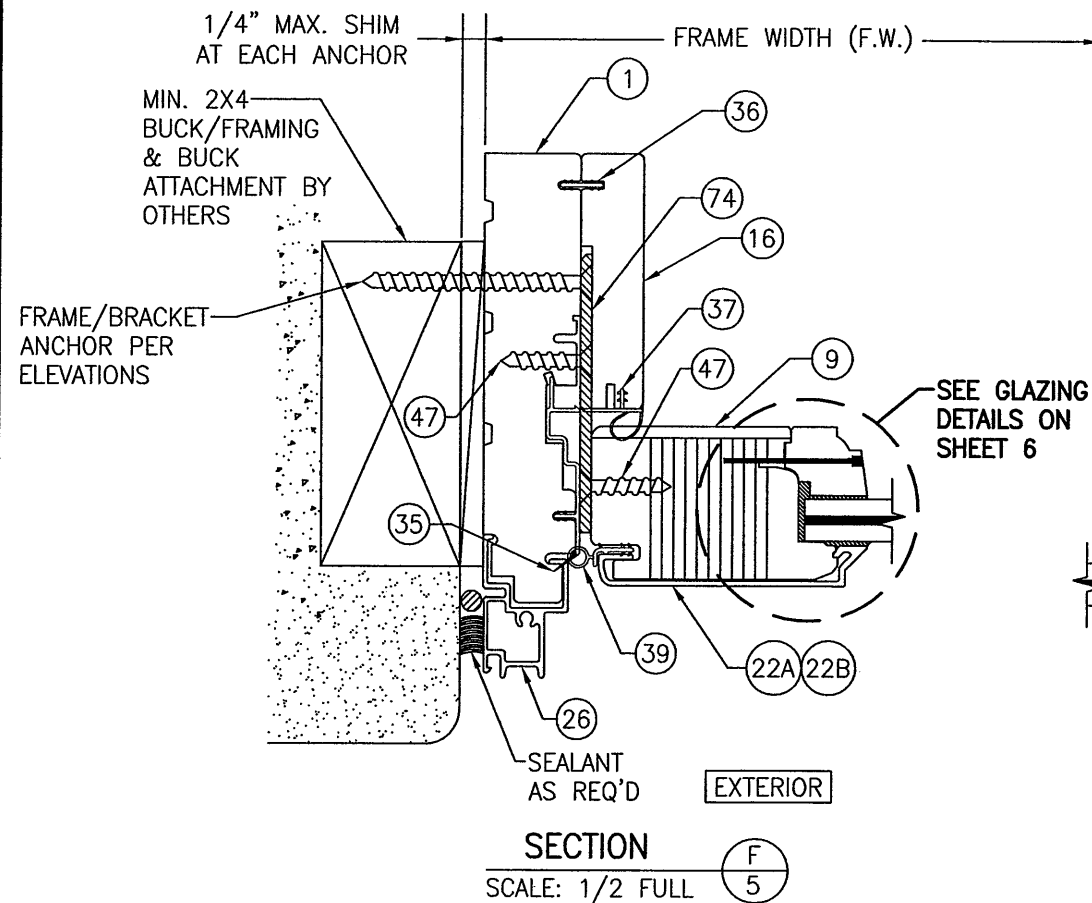
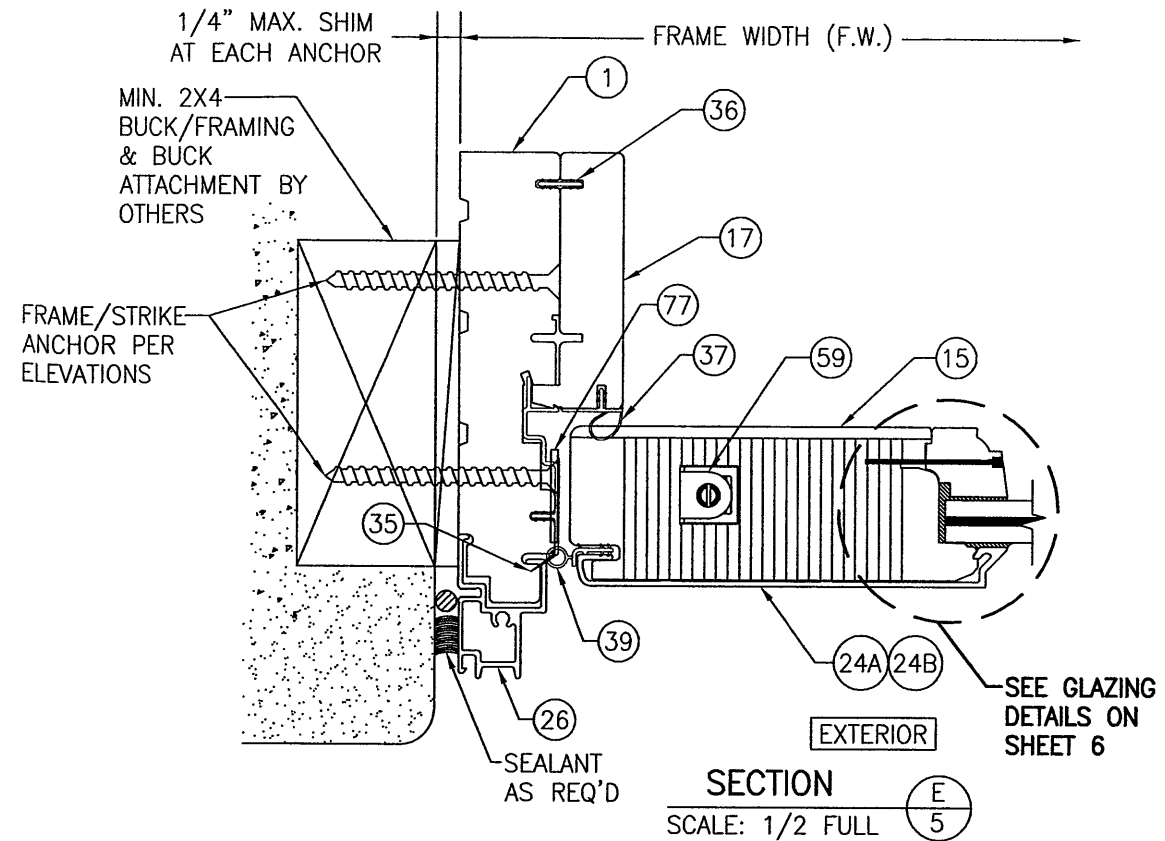
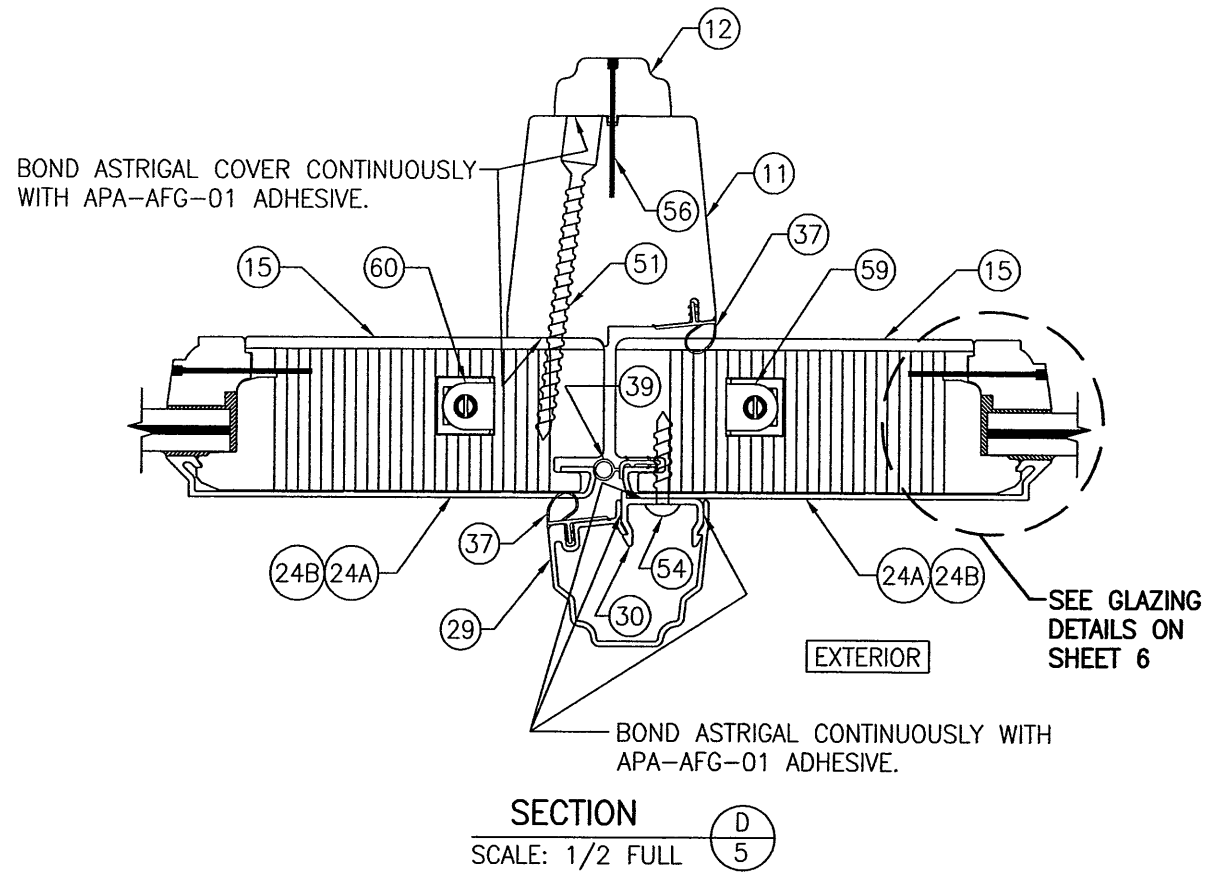
DRAWN BY: W.R.M.		CHECKED BY: W.W.S.	
PLOT: 1=16		DATE: 8/17/06	
NO.	REVISION	DESCRIPTION	DATE
DRAWING TITLE 8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS			
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809)		MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424			
CERTIFICATION <i>[Signature]</i> SEP 11 2012 WARREN W. SCHAEFER, P.E. P.E. NO. 44135		DRAWING NO. 1487	
SHEET NO. 3		REV. B	
OF 11			



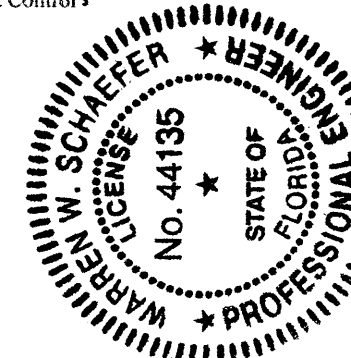
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 12-0913.06
Expiration Date 05/03 12017
By *[Signature]*
Miami Dade Product Control



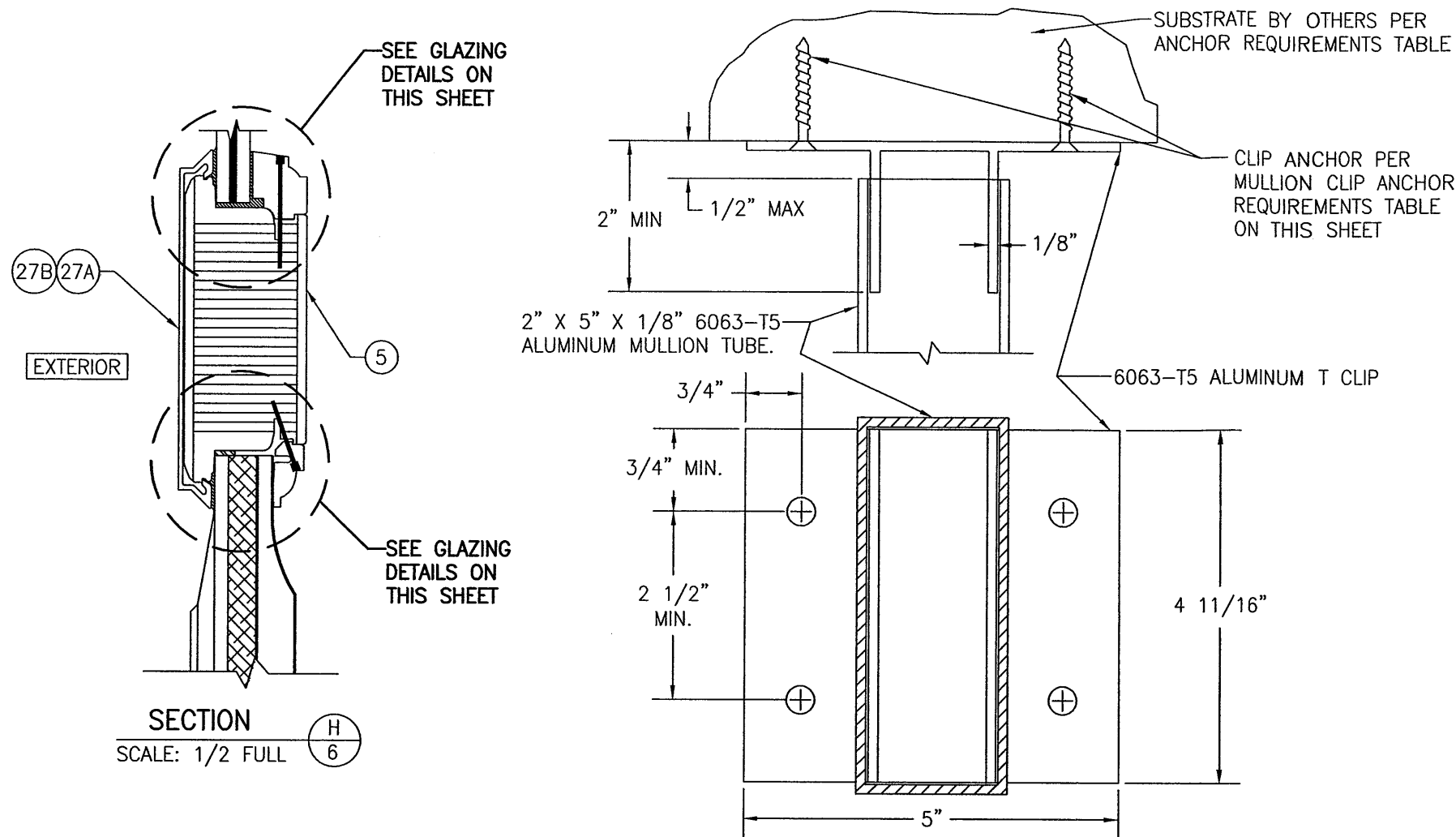
DRAWING NO. 1487	REV. B	SHEET NO. 4 OF 11	CERTIFICATION  SEP 11 2012 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	DRAWING TITLE 8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS	CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
					NO. REVISION DESCRIPTION BY DATE	PLOT: 1=2	CHECKED BY: W.W.S.	DATE: 8/17/06



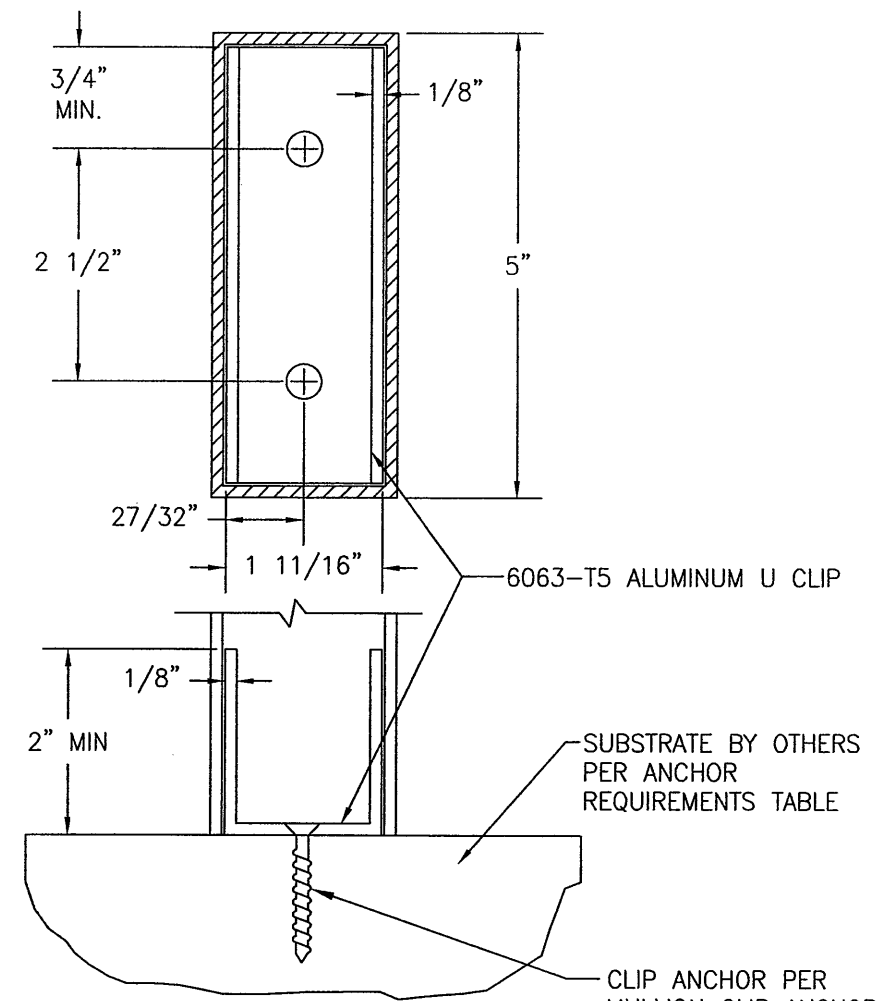
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PLOT: 1=2	DATE: 8/17/06
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE 8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS	
MANUFACTURER MARVIN WINDOWS & DOORS HIGHWAY 11, P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. (CA 6809) 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424	
CERTIFICATION SEP 11 2012 WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO. 1487	REV. B
SHEET NO. 5 OF 11	



HEAD MULLION END DETAIL
NOTE: JAMBS, CLADING, & DOOR MEMBERS NOT SHOWN FOR CLARITY.



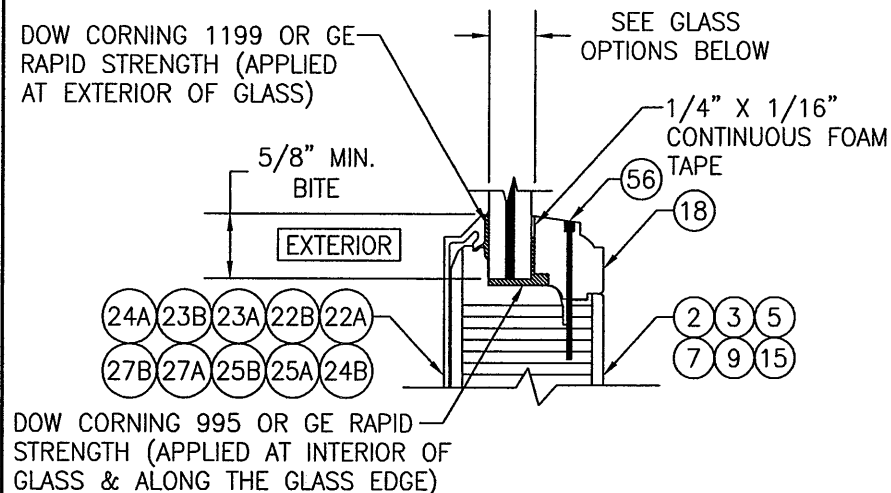
SILL MULLION END DETAIL

NOTE: JAMBS, CLADING, & DOOR MEMBERS NOT SHOWN FOR CLARITY.

MULLION CLIP ANCHOR REQUIREMENTS TABLE

OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
2X_ WOOD FRAME OR BUCK	NO. 12 SMS SCREW	1 1/4"	3/4"
MIN. 1/8" THK. A36 STEEL	NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW	FULL	1/2"
MIN. 1/8" THK. 6063-T5 ALUMINUM	NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW	FULL	1/2"
MIN. 18 GAGE 33 KSI METAL STUD	NO. 12 SELF DRILLING/TAPPING GRADE 5 SCREW	FULL	1/2"
MIN. 2500 PSI CONCRETE	(1) 1/4" CONCRETE SCREW	1 1/4"	2"

(1) CONCRETE SCREWS SHALL BE ELCO ULTRACONS, ELCO CRETE-FLEX, ITW RAMSET/RED HEAD TAPCONS OR HILTI KWIK-CON II (HARDENED STEEL OR S.S.).

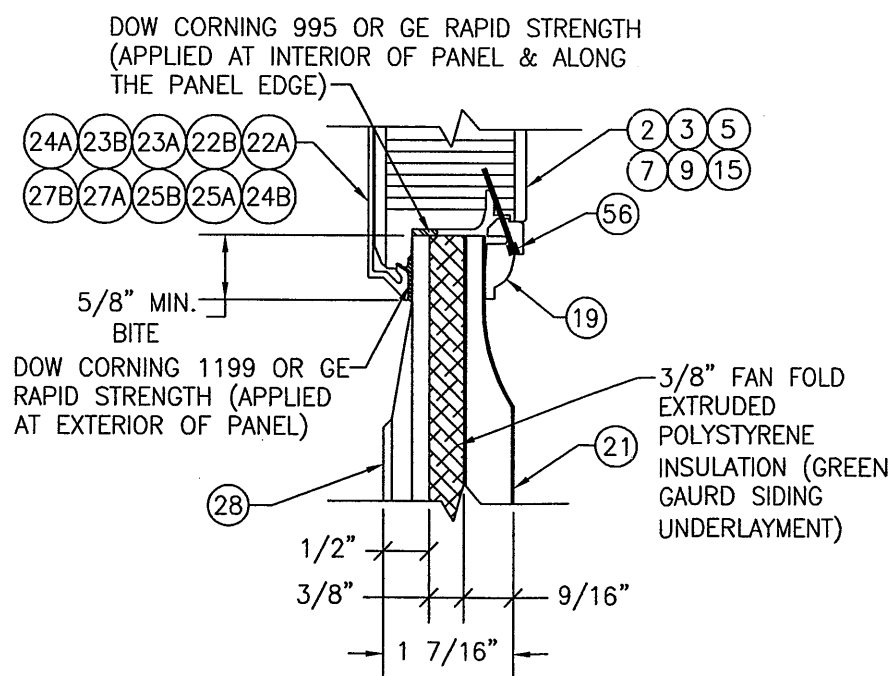


GLAZING DETAIL 1

SCALE: 1/2 FULL

OPTION 1: 3/8" LAMINATED GLASS SUPPLIED BY CARDINAL (5/32" ANNEALED/.090 DUPONT SG/5/32" ANNEALED)

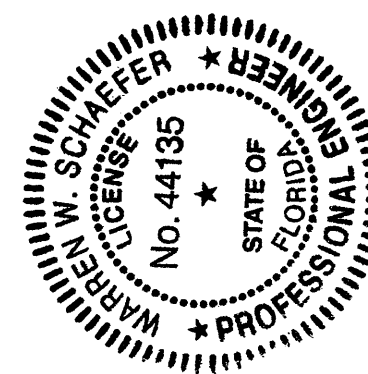
OPTION 2: 1/2" LAMINATED GLASS SUPPLIED BY CARDINAL (3/16" ANNEALED/.090 DUPONT SG/3/16" ANNEALED)



GLAZING DETAIL 2

SCALE: 1/2 FULL

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8 FT. ALUMINUM CLAD OUT-SWING WOOD IMPACT DOORS

MANUFACTURER
MARVIN WINDOWS & DOORS
HIGHWAY 11; P.O. BOX 100
WARROAD, MN 56763
800-346-5044

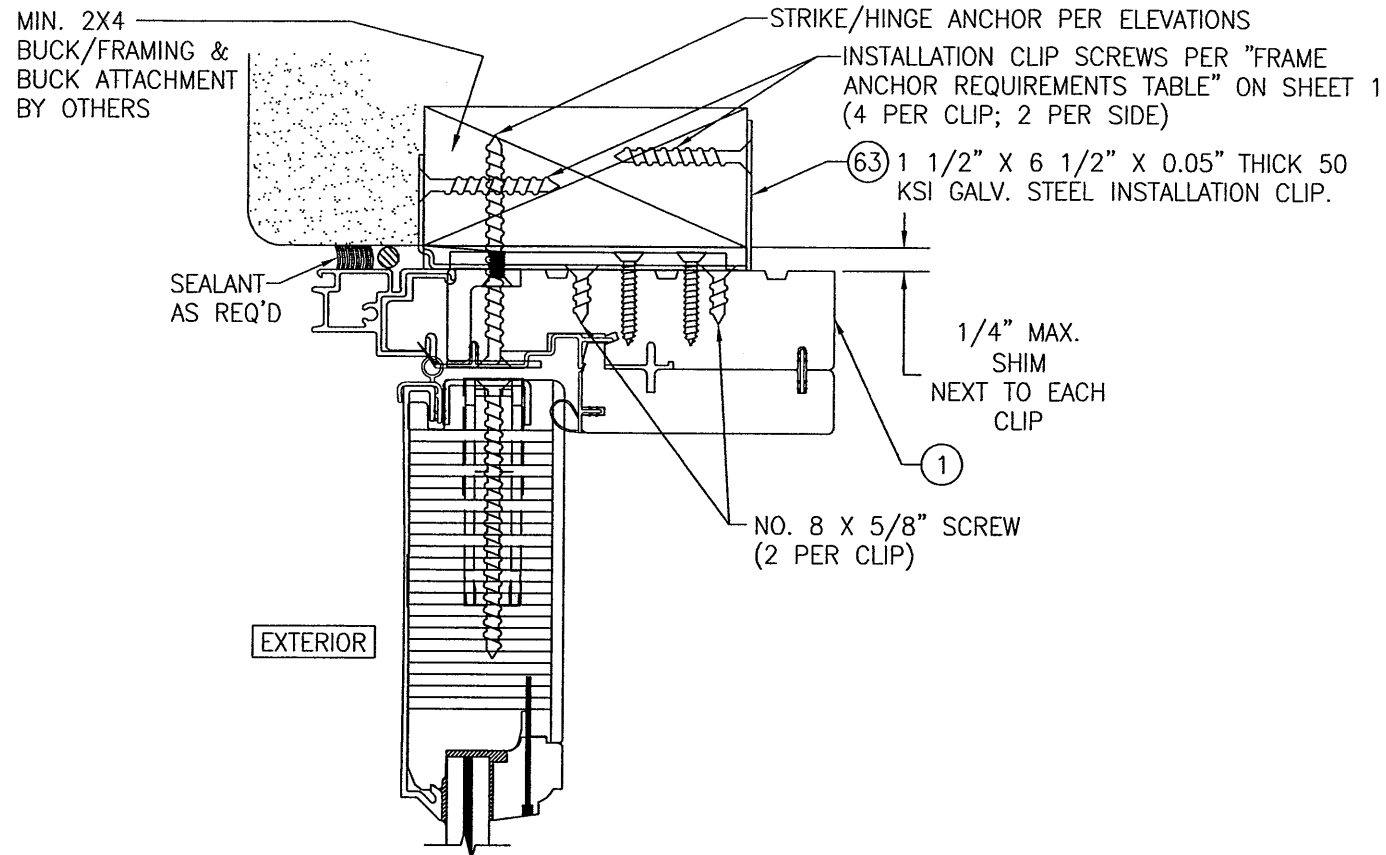
CONSULTANTS
W. W. SCHAEFER ENGINEERING
& CONSULTING, P.A. (CA 6809)
7480 150TH COURT NORTH
PALM BEACH GARDENS, FL 33418
PHONE: 561-744-3424

DRAWING TITLE

CERTIFICATION

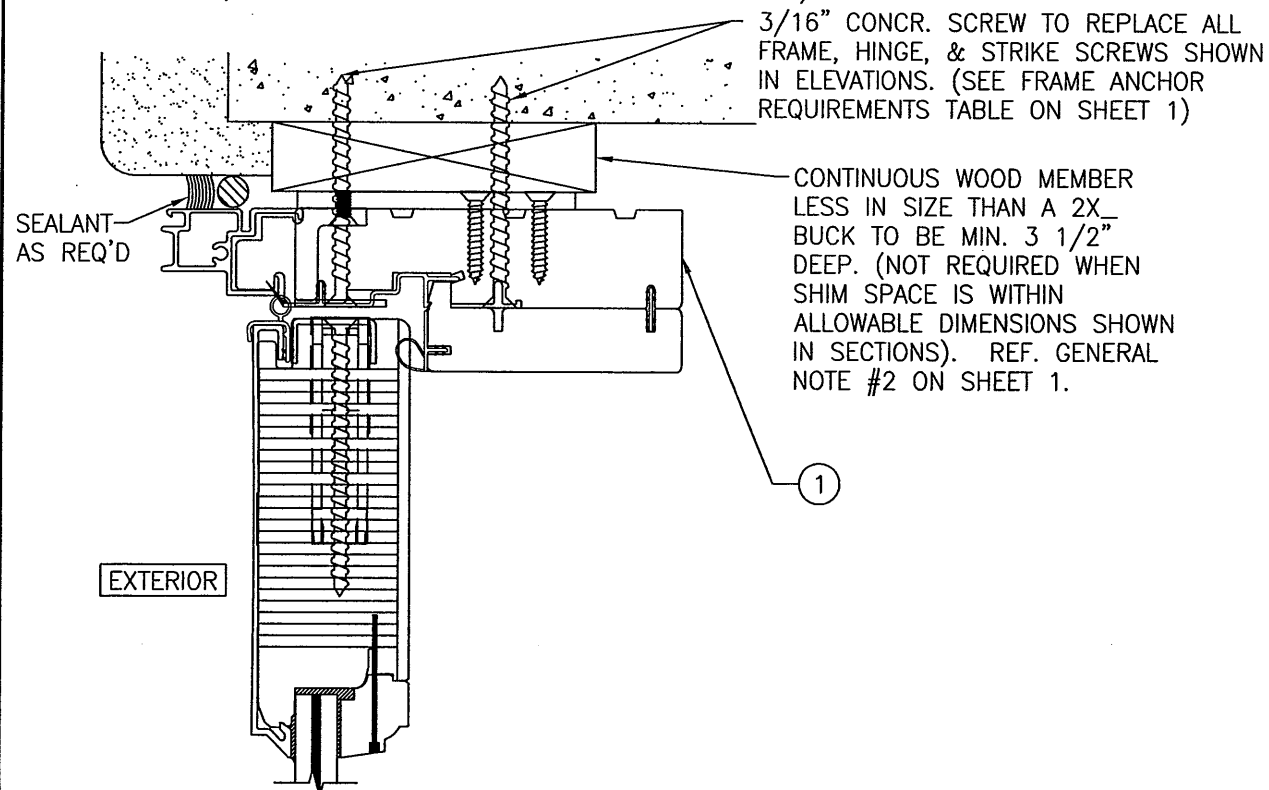
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WARREN W. SCHAEFER, P.E.
E.E. NO. 44135

DRAWING NO. 1487
REV. B
SHEET NO. 6 OF 11



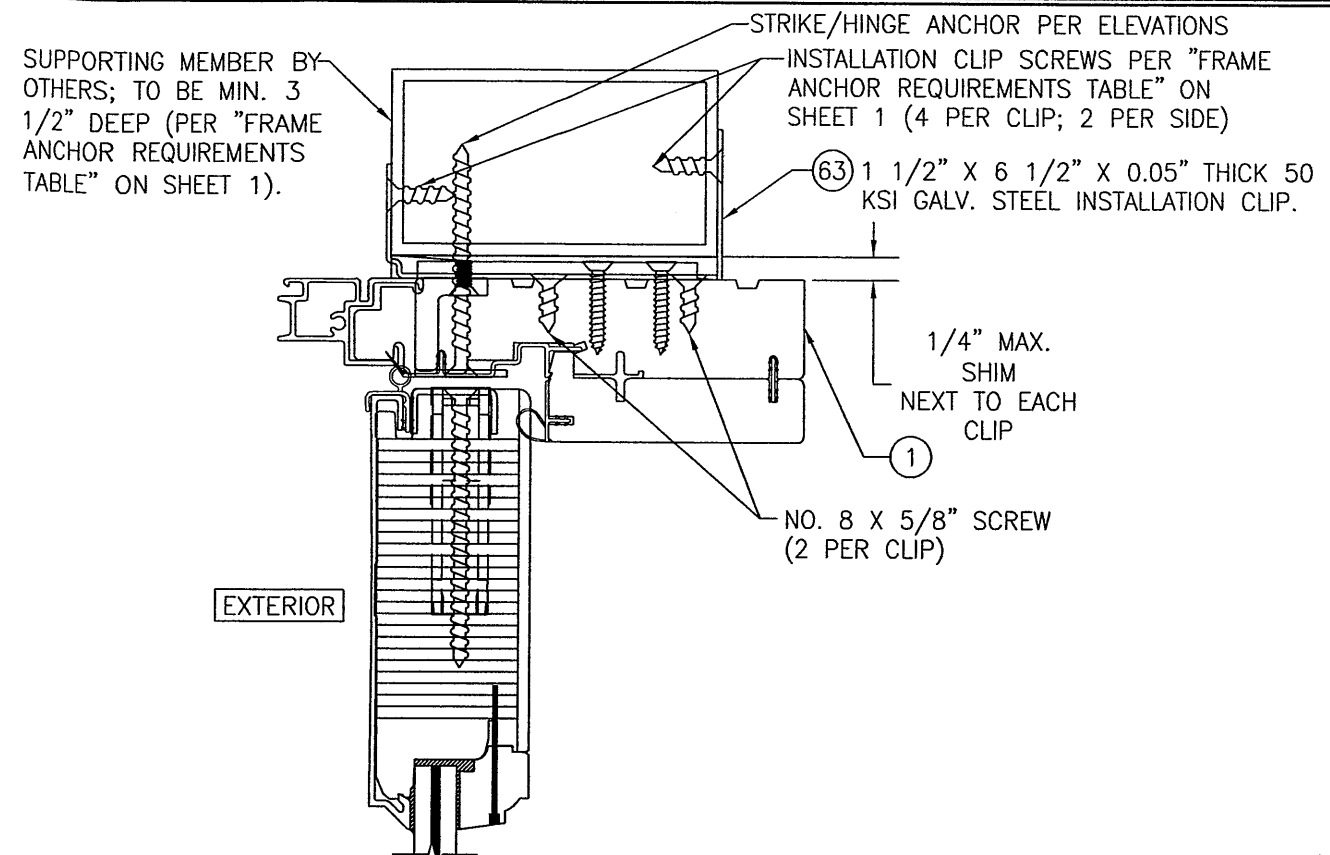
OPTIONAL INSTALLATION CLIP MOUNT DETAIL

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(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



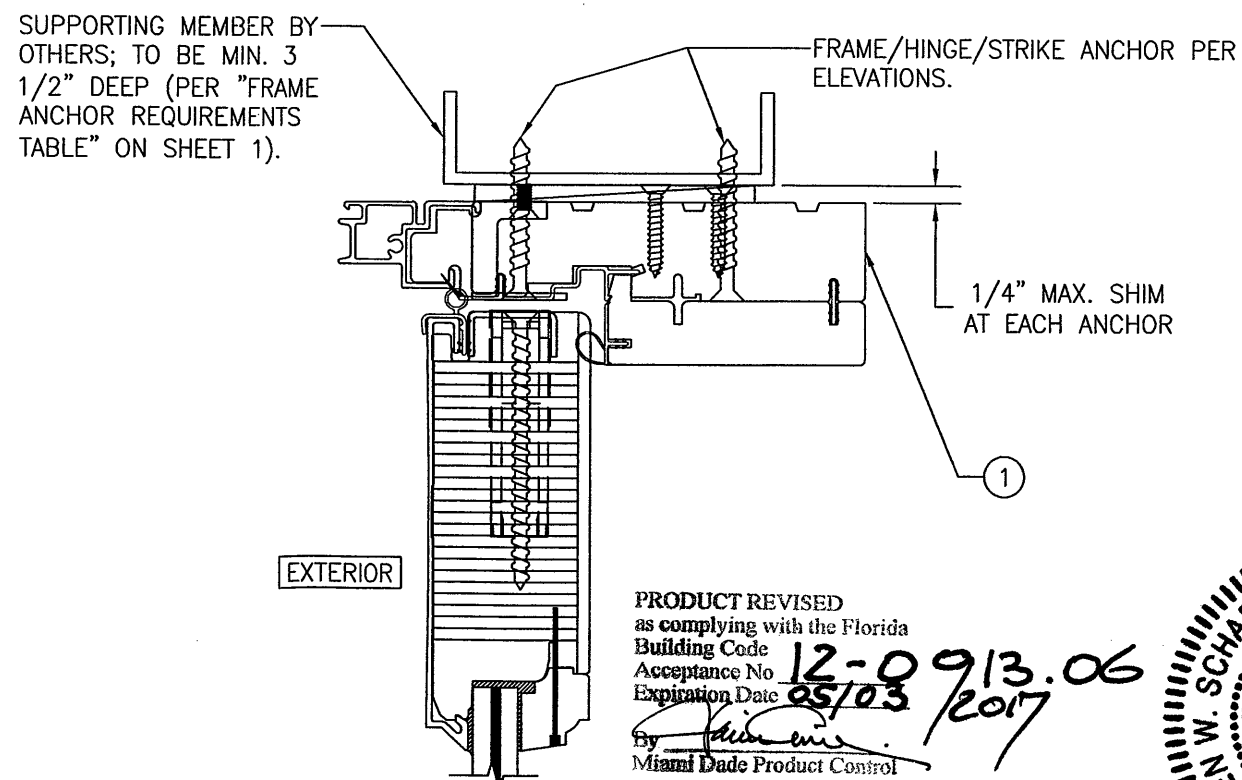
OPTIONAL DIRECT MOUNT DETAIL TO BLOCK OR CONCRETE WITH SPACER OR SHIM

(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



OPTIONAL CLIP MOUNT DETAIL TO ALUMINUM OR STEEL

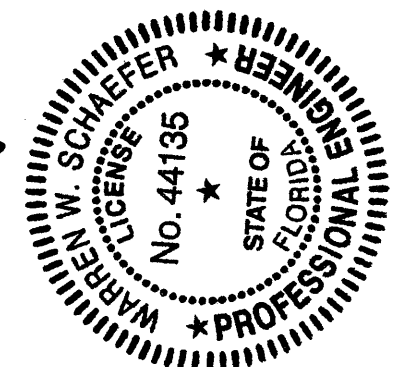
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(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)



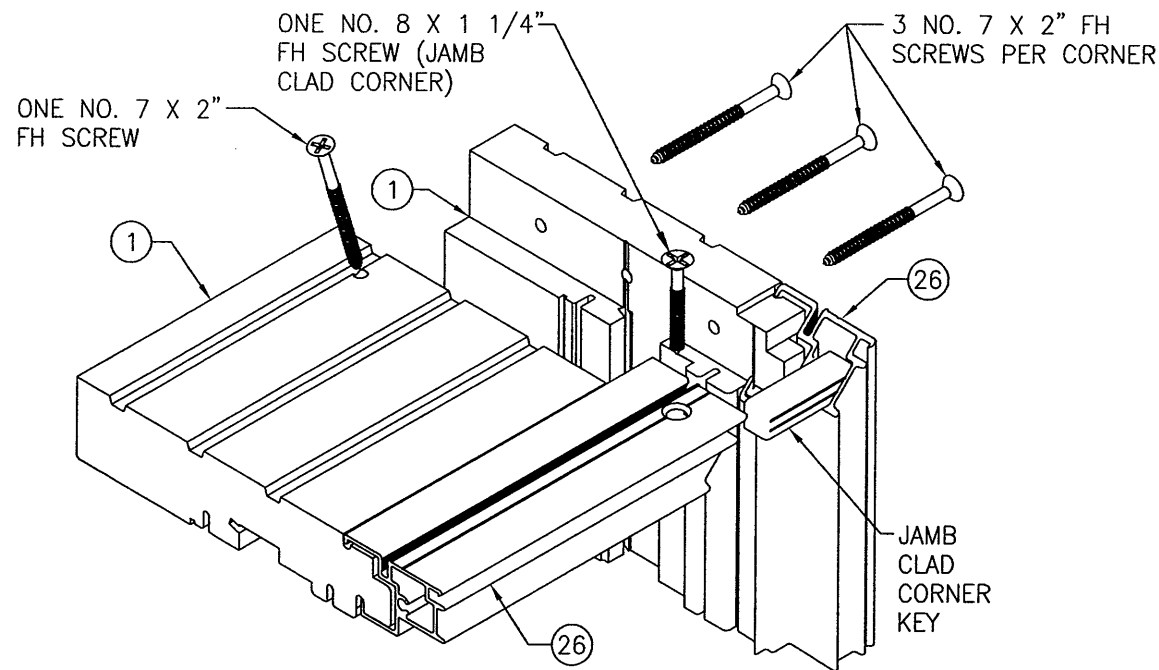
OPTIONAL DIRECT MOUNT DETAIL TO ALUMINUM, STEEL, OR METAL STUD

(HEAD SECTION SHOWN, SIDES ARE SIMILIAR)
(FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS)

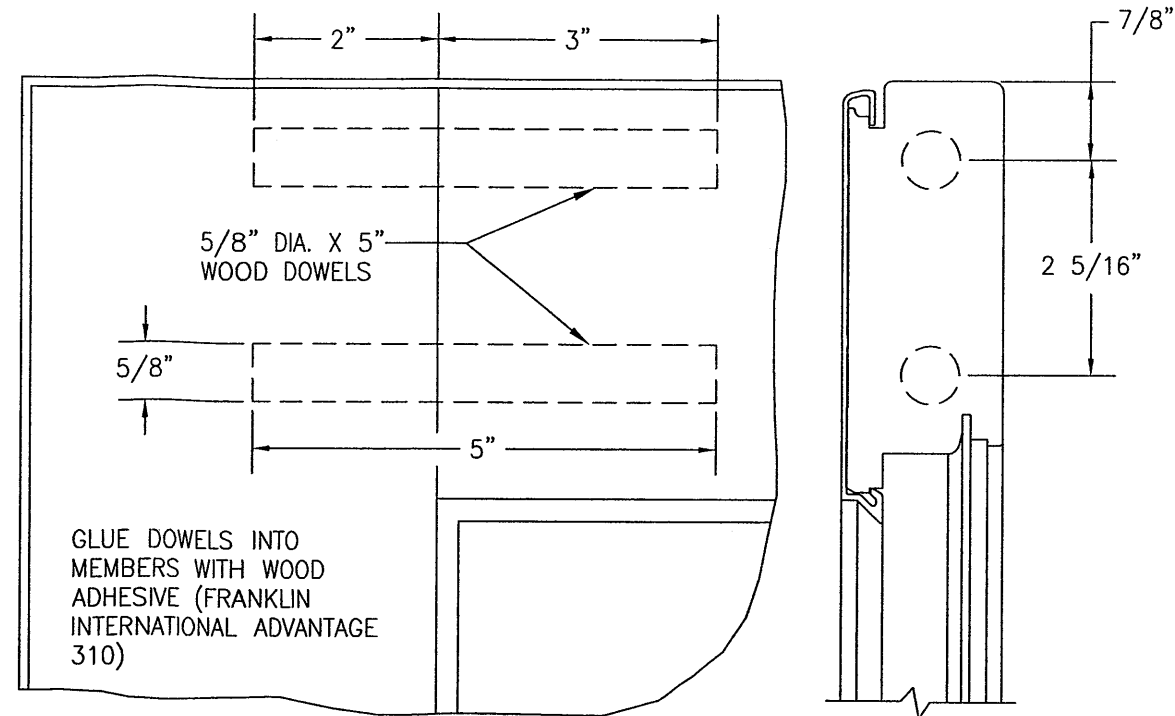
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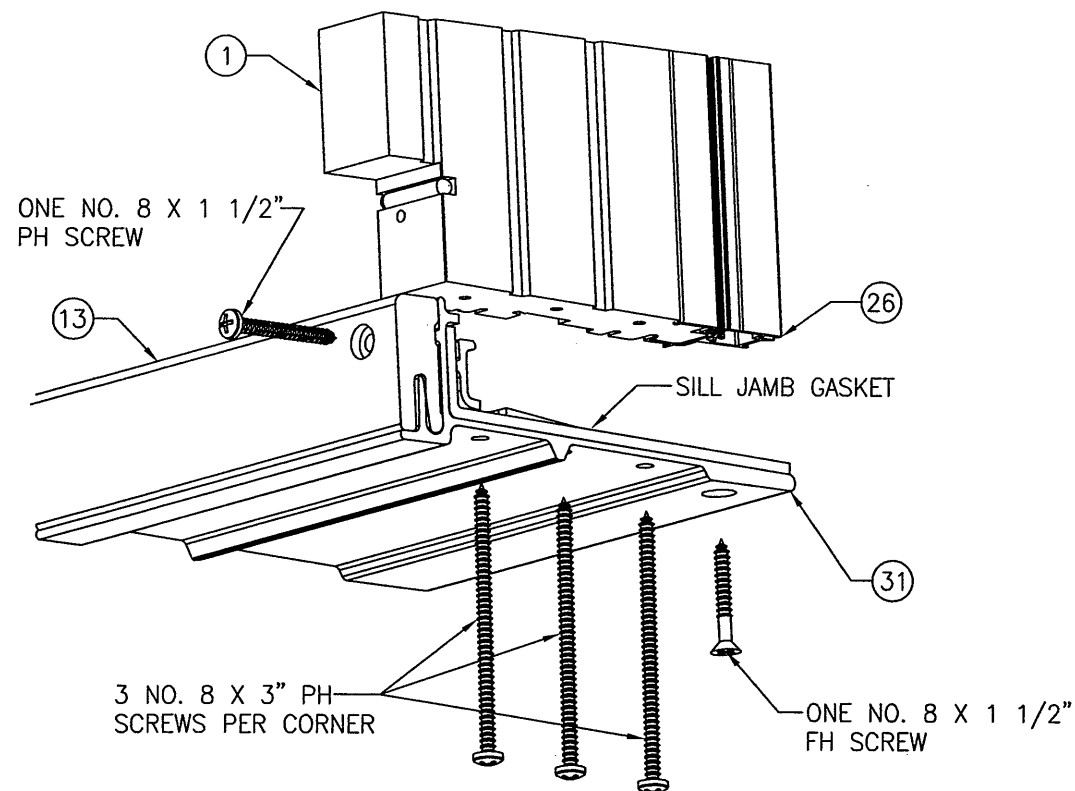
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7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424		HIGHWAY 11; P.O. BOX 100 WARROAD, MN 56763 800-346-5044	
CERTIFICATION	SEP 11 2012 WARREN W. SCHAEFER, P.E. P.E. NO. 44135		
DRAWING NO. 1487	REV. B	SHEET NO. 7 OF 11	



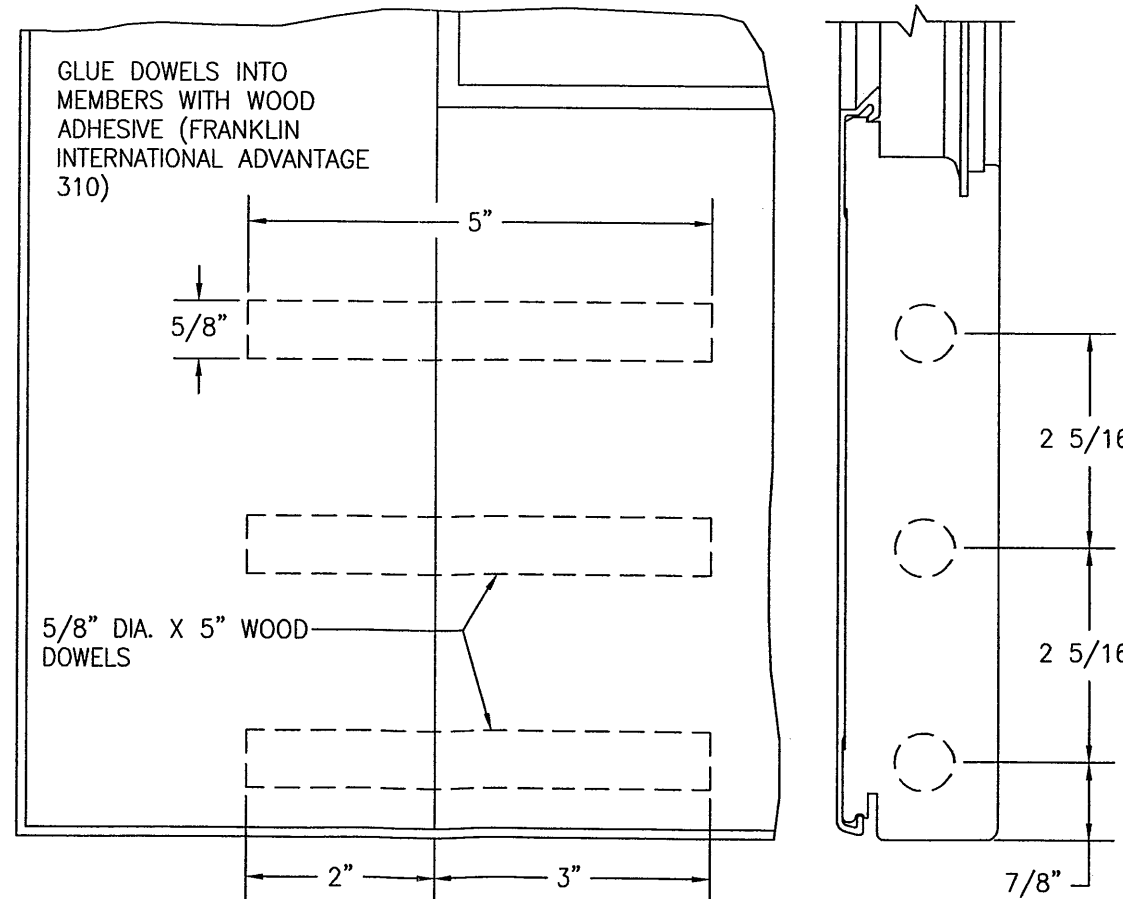
JAMB TO JAMB CORNER DETAIL



STILE TO TOP RAIL CORNER DETAIL

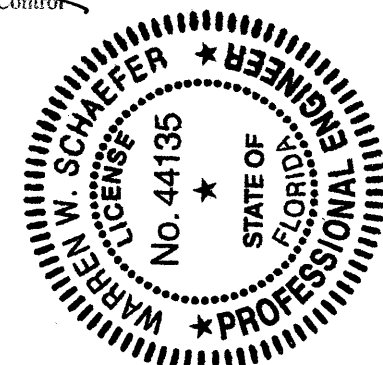


JAMB TO THRESHOLD CORNER DETAIL

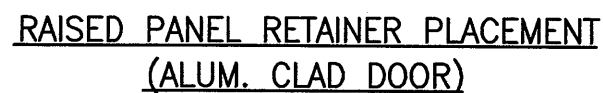
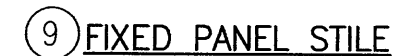
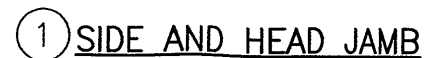


STILE TO BOTTOM RAIL CORNER DETAIL

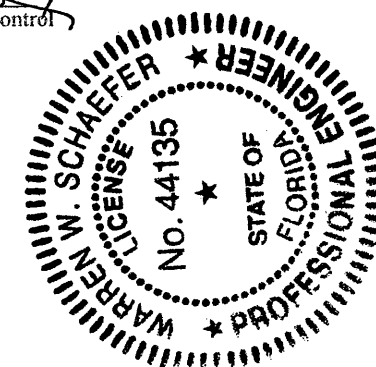
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